

Tugboat TIPM NO.13302 and Ro-Ro Passenger Ship NEW TAI

MA Major Marine Occurrence

Executive Summary

On August 25, 2023, at about 0956 local time, a Taiwan-flagged tugboat, TIPM No. 13302 (Official No. 012336, with a gross tonnage of 336), collided with a Taiwan-flagged ro-ro passenger ship, NEW TAI MA (IMO No. 9939709, with a gross tonnage of 5341), while the TIPM No. 13302 was assisting the NEW TAI MA during its outbound operation at Fuaoport, Lienchiang County. The incident resulted in hull scratches on the NEW TAI MA, and the TIPM No. 13302 sustained damage to its port side, leading to flooding and eventual sinking. There were no casualties. Some oil leaked from TIPM No. 13302; however, the oil spill was contained and did not significantly expand oil pollution.

In accordance with the Taiwan's Transportation Occurrence Investigation Act and the Casualty Investigation Code of the International Maritime Organization, the TTSB is an independent transportation occurrence investigation agency responsible for conducting this investigation. The investigation team also included members from the Maritime and Port Bureau of the Ministry of Transportation and Communications, TIPC Marine Corporation, Ltd., Kaohsiung Marine Shipperservice Co., Ltd. and All Ports Transportation Co., Ltd.

After comprehensive investigation and analysis of the factual data, a total of 6 findings and 4 safety recommendations were obtained.

The finding related to probable cause is as follows:

1. The tugboat TIPM No. 13302, after assisting the NEW TAI MA ro-ro passenger ship in departing from the Fuaoport berth and releasing the towing

line, was in the process of repositioning to standby on the starboard side of NEW TAI MA. However, instead of first moving away from the stern of NEW TAI MA to maintain a safe following distance, the tugboat adjusted its heading in place directly behind the vessel before proceeding to the starboard side. During this maneuver, the captain of TIPM No. 13302 did not adequately account for the fact that NEW TAI MA was still slowly moving astern while also turning to port, which posed a potential collision risk and causing the two vessels to gradually close the distance. While TIPM No. 13302 completed its turn and moved forward to the right, she collided with the starboard aft corner of NEW TAI MA's stern extension plate, causing damage to the port side of TIPM No. 13302. As a result, TIPM No. 13302 sustained hull damage, water ingress, and eventual sinking.

The findings related to risk are as follows:

1. Kaohsiung Marine Shipperservice Co., Ltd. did not establish rules for the practical operation assessment of the newly appointed tugboat captain in assisting with the berthing and unberthing operations at the port, and the handover procedure has not been fully implemented. As a result, it is not plausible to effectively evaluate the safety and operational risk of newly appointed tugboat captains during the process of assisting vessels in berthing and unberthing.
2. The captain of the NEW TAI MA ro-ro passenger ship had previously noticed, during several operations before the occurrence, that the tugboat master of the occurrence exhibited risky positioning when preparing to assist with vessel departures. However, the NEW TAI MA captain did not discuss with the tugboat master regarding the operational plan.

The other findings are as follows:

1. At the time of the occurrence, Fuaa Port experienced a north-northeast wind

at Beaufort scale level 2, with clear weather conditions, the visibility is 7 kilometers.

2. At the time of the occurrence, the steering gear, main engine, and navigation equipment of NEW TAI MA and TIPM NO.13302 were all functioning normally.
3. At the time of the occurrence, all seafarers of the NEW TAI MA and the TIPM NO.13302 all held valid competency certificates issued by the Taiwan maritime authority.

Safety Recommendations

To Lienchiang County Government

1. Formulating a communication and problem-response mechanism for ship and port tugboat operations, as well as implementing relevant safety measures to reduce the risk associated with the unfamiliarity of ships or port tugboats with port operations.

To Kaohsiung Marine Shipperservice Corp.

1. Establishing a comprehensive handover procedure and assessment mechanism for the newly appointed tugboat captain to ensure that the captain is familiar with the vessel's berthing and unberthing operations, thereby reducing the potential risk associated with unfamiliarity in these critical tasks.
2. Enhancing the operational communication and problem-response mechanism between the captains of the ship and the port tugboat, and implement relevant safety measures to reduce the risk associated with the unfamiliarity of ships or port tugboats with port operations.

To All Ports Transportation Co.

1. Enhancing the operational communication and problem-response mechanism between the captains of the ship and the port tugboat to reduce the risk associated with the unfamiliarity of ships or port tugboats with port operations.

Note: The final report of this occurrence investigation is published in Chinese. To facilitate understanding for non-Chinese readers, the Executive Summary has been translated into English. While every effort has been made to ensure accuracy, discrepancies may occur. In the event of any inconsistency, the Chinese version shall prevail.